We Claim:

1. A process for testing genomic DNA for detecting if at least one base is present, whether inherited or not inherited, comprising:
   a) making a solution comprising the genomic DNA;
   b) adding a primer that hybridizes to a targeted section of the genomic DNA wherein a base at or within 3 bases of the primer 3' end will hybridize and extend along the genomic DNA if the base is present and will not hybridize if the base is not present;
   c) mixing a DNA polymerase into the solution;
   d) amplifying the targeted section of the genomic DNA if the base at or within 3 bases of the primer 3' end hybridizes;
   e) capturing amplified polynucleotide strands to a solid support wherein the solid support contains probes sequenced to hybridize to amplified product having the base but to not hybridize if the base is not present; and,
   f) detecting amplified polynucleotide strands if the base is present and non-detection of polynucleotide strands if the base is not present.

2. The process of claim 1 wherein capturing amplified polynucleotide strands comprises hybridizing the strands to a probe.

3. The process of claim 2 further comprising denaturing amplified polynucleotide strands to form single-stranded polynucleotides.

4. The process of claim 3 wherein denaturing comprises separating double-stranded polynucleotides with a process selected from the group consisting of heat denaturing and chemical denaturing.

5. The process of claim 4 wherein denaturing comprises chemical denaturing.

6. The process of claim 5 wherein the probe comprises a DNA for hybridizing to amplified polynucleotide strands.

7. The process of claim 6 wherein the solid support comprises a microtiter plate.

8. The process of claim 7 wherein step g comprises adding a reporter label to the solution.

9. The process of claim 8 wherein the reporter label is selected from the group consisting of enzyme labels, fluorescence labels, luminescent labels, vesicle labels and particle labels.

10. The process of claim 9 wherein the reporter label comprises an enzyme label.

11. The process of claim 7 wherein the microtiter plate comprises a well coated with streptavidin.

12. The process of claim 11 wherein the polynucleotide probe further comprises a biotin compound.

13. A process for detecting a base in a targeted section of genomic DNA, whether inherited or not inherited, comprising:

a. obtaining the genomic DNA;
b. mixing the genomic DNA with a primer that hybridizes to the targeted section of the genomic DNA wherein a base at or within 3 bases of the primer 3' end hybridizes to the genomic DNA if the base is present;
c. amplifying the targeted section of the genomic DNA if the base at or within 3 bases of the primer 3' end hybridizes;
d. capturing amplified polynucleotide strands to a solid support wherein the solid support contains probes sequenced to hybridize to amplified product having the base but to not hybridize if the base is not present; and,
e. detecting amplified polynucleotide strands if the base is present.]

14. The process of claim 13 further comprising separating amplified polynucleotides of step c into single-stranded polynucleotides.

15. The process of claim 14 wherein separating comprises chemical denaturing.

16. The process of claim 15 further comprising attaching a reporter label to the complex for quantifying presence of the complex.

17. A kit for testing genomic DNA for conditions, whether inherited or not inherited, comprising:

a) a receptacle containing a primer having a nucleotide sequence substantially complementary to a diagnostic section of the DNA;

b) a solid support; and,

c) a receptacle containing a reporter label.

18. The kit of claim 17 further comprising a receptacle containing a probe for attaching to amplified diagnostic sections.

19. The kit of claim 18 further comprising a receptacle containing denaturing compound.

20. The kit of claim 17 wherein a capture probe is attached to the solid support